

LISTING OF CLAIMS

Claims 1-15 (to non-elected species; withdrawn)

16. (Original) In a method for manufacturing an electronic package having solderable metal bumps as a connecting means, the improvement comprising:

providing an insulating substrate having metallic pads as a base for the package;

depositing a metal on the substrate over the metallic pads, the metal having a melting point over 350 °C, and below the melting point of the metal forming the metallic pads;

melting the metal so that it draws back onto the metallic pads, forming metal bumps on the metallic pads.

17. (Original) In a method for manufacturing an electronic package having metal bumps according to claim 16, wherein the metal is deposited over the metallic pads in a powdered form.

18. (Original) In a method for manufacturing an electronic package having metal bumps according to claim 17, wherein the powdered metal is deposited by screen printing.

19. (Original) In a method for manufacturing an electronic package having metal bumps according to claim 16, the improvement comprising:

providing the insulating substrate with metallic pads of metals selected from the group

consisting of refractory metals and the metals of Groups 8 and 1b of the Periodic Table of Elements and alloys and combinations of those metals;

depositing a lower melting metal selected from the group consisting of aluminum and aluminum alloys, copper and copper alloys, silver and silver alloys, gold and gold alloys, nickel and nickel alloys and combinations of those metals, over the metallic pads; and

melting the lower melting metal so that it draws back onto the metallic pads, forming metal bumps on the metallic pads.

20. (Original) In the method of manufacturing an electronic package according to claim 19, wherein the metal of the metallic pads on the insulating substrate are selected from the group consisting of chromium, molybdenum, nickel, tungsten, molybdenum/manganese and titanium/tungsten.

21. (Original) In the method of manufacturing an electronic package according to claim 20, wherein the metal forming the bumps comprises copper.

22. (Original) In the method of manufacturing an electronic package according to claim 20, wherein the metal forming the bumps is selected from the group consisting of silver, gold, silver alloys and gold alloys.

23. (Original) In the method of manufacturing an electronic package according to claim 22, wherein the bumps are coated with a barrier metal capable of preventing the bumps from

dissolving in molten solder.

- Aid*
24. (Original) In the method of manufacturing an electronic package according to claim
23, wherein the barrier metal is coated with a solder aid to enhance solderability
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Respectfully submitted,

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